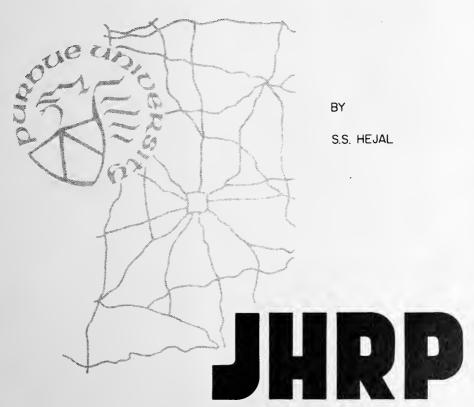
# TRAFFIC SPEED REPORT NO. 87

# NOVEMBER 1969 - NUMBER 32



JOINT HIGHWAY RESEARCH PROJECT

PURDUE UNIVERSITY AND

INDIANA STATE HIGHWAY COMMISSION



### TRAFFIC SPEED REPORT NO. 67

To: J. F. McLaughlin, Director

Juint Highway Research Project

November .8, 1969

From: H. L. Michael, Associate Divector

File: 5-4-3

Joint Highway Research Project

Projects 0.36-100

The attached Progress Report No. S7 on Thr. fic Syceon is the report of the 1969 study of free-flowing on out like and truck threas on nural, tangent, level sections of Interprett, the helene and 2 lane highways in Indiana. The study and report have been perimaked of Mr. Salim S. Wejal, a Graduate Instructor in Research on our shaff, misr the direction of Professor Michael.

The results indicate an increase of about . A mps or the at mase speed of all passenger cars and an tactease of about the man for all hear, trucks to those speeds noted in the 1968 Judy. A registion analysis of the speed fata for the part ale on peace indicate, that the speed trend for all classes of vehicles on all lacres or higher statics is an increasing one. Average speeds for passenger care over all classes of nighway have increased 1 03 mph annually and for all kerny on one all classes of highway the increase has been 0. [7 mph anreally.

Copies of this reger are requested for resease to the Julium. State Police, the Indiana Traffic Safety Council and the Indiana Our coof Paffic Safety as is nownal procedure for these reports from a will also be sent to the Dureau of Pahlic Board and several Departments within the ISHC. The report is presented for the record and for release as noted.

Pesyeraluly submitted,

Harola & Michael Image rescalate Director

H. Asna

cc. F. L. Ashbancle

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http://www.archivo.org/dotails/trafficanoodropo00hois
http://www.archive.org/details/trafficspeedrepo00heja

### Progress Report

TRAFFIC SPFED REPORT OF 17

by

Salim S. Hejak Sudaate Lastrucko

File No.: 8-3-1

Purdue University Lafayette, Indiana November 18: 1969

### ABS TRAUT

This report is the armial Chicker of Coffee and Venilla

on rural Indicate Control (Control (

A regression analysis on the state of the st



#### TRAFFIC SPEED REPORT NO. 87

This report is an analysis of opet speed observations made during

July and August 1969. All observations were made of free-floring

vehicles on level, tangent sections of rural Inciana highways during

daylight and under favorable weather conditions. The same locations

on selected Federal and State highways as used in 1938 were thed again

Most of these locations have been the same for many years. Stations

were classified as a uso lane, four land, or highways. A

representative sample of traffic types a was obtained on outer of the

four stations in each classification. The apacific sale is such sautic

was as follows: see Figure 1.

## American Helinia

- 7. 1-69 3.3 Miles a oth of Function of D R D -
- 2. I-65 L 0 Miles disc of Junction of S. P. ...
- 5. 1-74 1.0 Mile Exact of Junction of Political
- 4 I-69 2 9 Miles A rth of Gaetich of A A Por

# korr and Highways

- 5. U.S. 31 A.2 Miller Stuth of Carmiller tips ( )
- 6 V 3.52 1.0 Mile F tof Indulate as S h. B
- $\gamma$  ,  $\sigma$  = 0.1.0 MHz in  $\sigma$ h of So, a June for  $\sigma$  , R 2
- 8 % 1.02 1.0 Mile Welt of 1 make

# Two Ene Highests

- 9. U. S. 41. 1.0 Mile North of Boswell
- 10. S. R. 43 2.0 Miles South of Galmers
- 11. U.S. 31 3.0 Miles South of Rochester
- 12. S. R. 25 0.7 Miles West of Americas

The vehicles were classified as passenger cars or trucks. Passenger cars were further classified into two groups - Indiana or Non-Indiana and the analysis was performed as thus classified and combined. The trucks were also classified into two groups - Light fless than 5000 pounds gross weight) or Heavy (equal to or more than 5000 pounds gross weight), and again the analysis was performed as classified and combined

The maximum speed limits in Indiana are as follows: 70 miles per hour on interstate highways and 65 miles per hour on other anghours, unless otherwise posted. The stated maximum speed limits were applicable at all interstate, four lane and two lane stations of this study.

# Equipment and Field Procedure

The observations for this report were obtained by use of an "Electromatic" Radar Speed Meter, built by Automatic Signal Division.

Eastman Industries, Inc., East Norwalk, Connecticut. The meter was placed approximately four feet from the edge of the pavement at an angle less than 10° with the highway center line. Speed inaccuractes are negligible at small angles (less than 10°) and therefore, corrections for angle were unnecessary.

At the beginning of the study the accuracy of the mater was chacked; a constant discrepact of minus two miles per our was found and hence all readings of speed were corrected accordingly.

# Results of Analysis

The data collected were analyzed and are summarized in Tables 1 to 12 in the Appendix. Tables 13, 14, and 15 summerize the data for the three types of facilities: interstate, four lane, and two lane. Table 16 is the summary for all facilities observed.



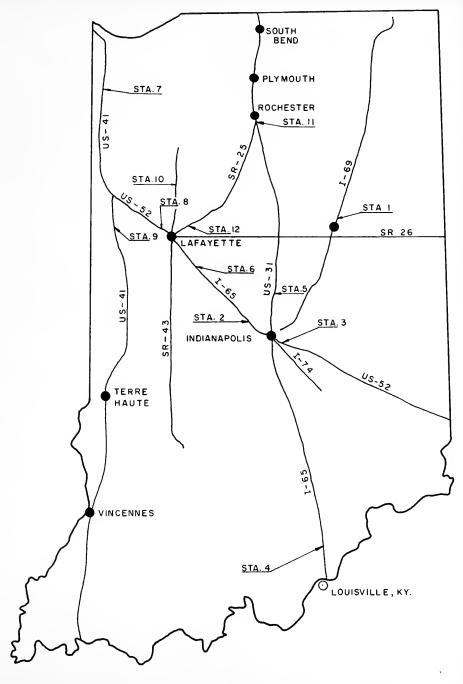


FIG. A - LOCATIONS OF SPEED-STUDY STATIONS



Figures 1 to 16 in the Appendix show the accumulative speed curves for each of the stations studied.

The average speed for each classification of vehicles on each type of highway for this study was as follows:

	Inversuate	Four Lane	Two Lane
Passenger cars:			
Indiana	70.2	67.7	54.7
Non-Indiana	712	68.3	64,6
85 percentile (all)	76.6	74.8	71-9
Trucks:			
less than 5000 lbs.	65.3	64.0	60.5
5000 lbs, or more	50,0	58.0	55.9

The percent of vehicles exceeding the speed limit for each classification of vehicle and each type of highway was as follows:

	Interstate	Iour lane	THO MAR
Passenger cars:			
Indiana	48.9	65,4	45.0
Non-Indiana	57.6	70.1	45.4
Trucks:			
less than 5000 lbs	17.1	FO.C	24,5
5000 lbs. or more	5.5	13.8	6.7



The percent of vehicles traveling 5 miles per hour or more above the speed limit for each case was as follows:

	Enterstate	Four Lane	Two Lace
Passengar care:			
Indiana	20.6	36,6	22.5
Hon-Indians	25.0	36.7	21 0
Trucks:			
less than 9000 los.	10,4	18.5	15 7
5000 lbs or more	8,0	2,0	1.3

The results of the study and similar studies conducted since 1959 are tabulated in Table A. A linear regression analysis on these results was conducted and a summary is given in Table B.

The hypothesis  $\beta=0$ , where  $\beta$  is the slope of the linear graph of speeds versus year (sen all bound), was tested and in turned out significant for all classifications at the 5% level. A second hypothesis  $\beta=1.0$  was tested to draw limits on the arms trend. It was not significant for all the  $\xi$  cases, that is the slope is not significantly different than 1.0, mph/year for a 5% level of significance. Finally, the hypothesis  $\beta=1.5$  was tested, it was significant for all cases except for the 85% ills of interstate passenger ars.

A graphical representation of tables A and B is given in Figure B.



TABLE A

SUMMARY OF SPOT SPILED OB ERVATION

ON ANDIANA HIGHWAYS

(Free-Moving Vehicles on Level, Tax, an Sc. L. 4)

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		Mean	1.000 1.	ABOVELLE	855			
I'o-Lane	Highmana	3						
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Sept.	° 60	57	5.3 5.6	56 0	69 D			C- 1
Aug.	(3)	5.02	55.7	55 9	1,2,2	31	4. 2.	9.1
Aug.	*52	10.7	17.5	57.00	68.7			5.1
June	164	of.9	7 7	37-2	54 B	e e		G . 11
July	1.61	5/.1	ĈÓ, L	59 5				-2 1
Sept.	- 55	5,87	57.9	59 5 53 . L	EA C	÷( \$.	E ( -	17
Sept.	000	5 .1	39.5	39 3	3	Ĩ.	÷() 1	-2 (
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June	+ 20	5. 3		(1.)	53 a			72- 11
		JL. 7		54 7	11.9		# ( ) 	77-9
July	Thomas and the			J49 	3			( - )
Four-Lane	Haghat	12						
Aug.	139			19. \$.17	64 5		· ·	1.9
Sept	160	5 5		5.7	35.9			+2.0
Aug.	161	5 .6	57	77 5	13 <b>5</b> 13 8			52. C
Aug.	152	5: .2	15 5	19.4				11 6
June	152	50				5 0		1 1
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Sept.	° 5=	of .1.	<u>:</u> 2		112	19 1 18 7 17 0	4	13 7
Segt.	166	63.1	1		69.0	18.7	C.	
Aug.	168 167	64.3		35	70 3	1 0	56.0	46.5
Juna	1.58	51.2		÷4: 1	70 ':		55 .	56 2
July	155	37 7			74 3	SE 0	55	19.6
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httg.	1/27 1/2	50.7	4		64 0	C 20)		82.4
	151° 152	ES . 7	- 1 1	58.	65 6	35.0 35.0	92	53.2
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June	11 35	-5.7	14,0	32	20 S	\$5 2 -7 3	53.6	. C
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beg.	1 4		(-1, -3)		73 7	C	- 1	15.3
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6227	168 169		141 1		72 % 5 6	30.5		
July	95	10 2	1.4	70	3 0	15 3	59-1	61 4
All Highw	ays							
Aug.	159	56.5	58.4	57.	63.5	50.5	47.1	48.6
Sept.	160	57.3	57.6	57.4	63.7	53-7	49.4	50 2
Aug.	361.	56.9	56.7	57.3	63.4	58 at	50.0	51.0
Aug.	162	58.2	58.7	58	65.1	54 5	51.2	51 8
June	163	59.0	59.9	53.2	65-2	114 1	49.5	51.2
July	154	60.3	62.4	61.	69.2	45.3	50.5 52,0	514.3
Sopt,	165	59.9	(0.3	50.3	65 7	54.2	52,1	53 1
Sept.	165	61.3	62.4	úë.J	65.0	1.001	5= -	53.8
Aug.	167	63.9	65,8	134.5	71 1.	70.1 56.3		55 1
June	163	63.8	65.0	(3), =	70,5	57.2	5. 6	56 5
July	169	67.3	68.8	57.9	75.I	52 7	97.0	59 5
				1.2				

Data was only for three stations on Emery re- night ys



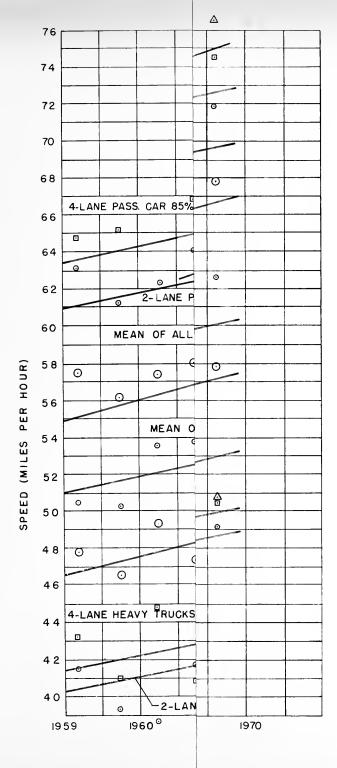
SUMMARY OF LINEAR RECRESSION ANALYSIS TABLE B.

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4 ianes Passenger Cars 85%	grow, Grow and the second	£ '#?'				4	李迢	* 82
2 Cars Opp		J. C. F.	6.0	143		÷ū	12	*22
Meun of All Passenger Cara		90 5 10		5\\ 5\\		7.00	1	*100
Mean of All Light Trucks	years	3.25	500	208.	1.	2, 523	No.	ν <sup>i</sup> -
Marie of Mar Hony	COLOR	66°6	6	206°	(.f.e.	*ta	SM	γ <sup>*</sup> Ω2
interstate Heavy	57	.32,77	550	0/8.		organismos objective statement of the st	Agenciano a contrato	°°°
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Not Significant @ 5% Level of Significance







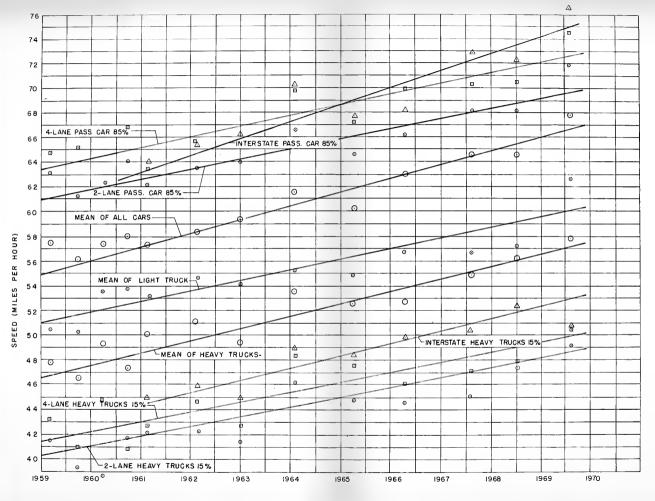


FIG.B - INDIANA RURAL SPEED TRENDS 1959 - 1969

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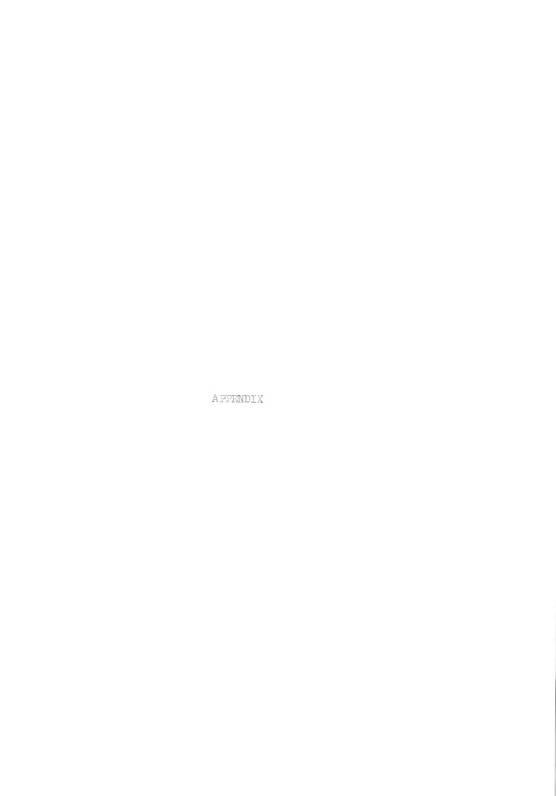
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Q.		





#### Determination of Sample Size

It was desired that a 95% confidence interval of 1. The mean of the speeds of passenger cars stoold not be wider than we make you have for trucks weighing 5,000 lbs, or more a 35% confidence in ordal with a four mile per hour band was desired.

Assuming a normal "Electribution of speed" and using the standard deviation of the grouped data of the 1963 study. The manual semple size requirements was determined by:

Was sample size required

ts = tabulated ': ' talce for 5/2 signuficance

S = estimatel stantal decision

. = width of the interval.

For passenger cors:

$$H = \left( \frac{2 \times 1.50 \times 6.9}{2} \right)^2 = 18; \text{ observations}$$

Ton timeks:

$$1 = \begin{cases} 2 \times 1.96 \times 5.1 \end{cases}^2 = 36 \text{ observations}$$

#### Low a

at all stations thre shan 235 passenger at a servations and 5-truck observations were obtained for the study reported herein.



TABLE 1 SPEED DATA

Present 57.93 50.0 5000 pounds 18.8 6.96 61.2 0.0 0.0 100 morre H2 ZY 5.54 21.0 96.8 8.8 57.6 59.5 Last 0.0 0.0 ् 6.4 58 Q 2.5 8 54. 8 Last Previous Observation (Speed Report No. Present 15.0 35.0 70.07 80.0 95.0 Less than 5000 pounds 0.49 68.2 0.0 0.0 0.0 0 0.0 5.0 TRUCKS 9 20 H 18 91.7 60.5 58.3 75.0 16.7 4.09 91.7 91.7 Last S.B. 0.0 0.0 0.0 0.0 8.3 8.3 100 O 3.3 Miles South of Present 61.2496.9 15.5 64.3 95.2 41.7 98.8 61.8 60.7 0.0 0.0 0.0 3.6 0.0 0.0 100 87 43 7 4 58.8 97.9 54.8 86.0 97.9 98.9 57.9 6.54 20.4 59.7 Last 0.0 0.0 0.0 5,4 100 H 64 Date Portland Cement Concrete Present 72.8 7.27 12.9 56.4 71.8 81.2 95.1  $\sigma$ 0.0 0.0 0.0 0.0 0.0 0.0 5.0 4.0 Won-Indiana 101 100 2 Location 68.7 6.84 24.3 50.0 85.1 93.2 38 68.9 Last 0.0 0.0 0.0 0.0 7.7 4.1 9.5 0.0 100 7 PASSENGER CARS Present 89.8 6.77 12.9 41.5 70.1 88 86 72.7 8.69 0.0 0.0 0.0 0.0 0.0 0,0 747 6.1 2 Indiana 2:15 p.m. This Observation Surface Last 90.9 69.7 93.0 8.6 67.3 66.1 66.7 0.0 0.0 0.7 7,4 2.7 9.5 142 0.0 100 2 69-I Present ı 9.07 35.9 64.5 7.01 12.9 86.3 4.96.4 5.24 73.2 0.0 0.0 0.0 0.0 0.8 0.0 0.0 121 127 11:40 Ŧ 6.40 63.0 4.79 30.3 96.8 67.8 67.0 29.5 Last 0.0 0.0 216 0.0 0.0 0.5 1.4 4.2 9.3 100 108 108 Highway Time Date Average speed (m.p.h. obs. obs. ilo. of vehicles obs. Standard deviation lio. of vehicles of vehicles m.p.h. u• d•ш OESERVATION 24 m.p.h. 29 m.p.h. m.p.h. m.p.h. m.p.h. 74 m.p.h. m.p.h. m.p.h. m.p.h. m.p.h. m.p.h. m.p.h. Average speed speed Н Avera Je 54 No. of Lanes ಶ 3 62 уеза JO Эt 02 Station % of vehicle All vehicles purnog



TABLE 2 SPEED DATA

Present 30.0 pounde 59.2 7,93 13.3 46.7 71.7 93.3 34 9.19 0.0 0.0 0.0 9 100 100 100 100 56 **BUON** Last Previous Observation (Speed Report No. 26 2000 Fair ä 21.0 62.0 0.8 58.1 44 92 57.9 Last 0.0 0.0 0.0 7.0 0.0 9 100 26 10:00 a.m. - 12:30 p.m. Present 53.8 66.0 11.5 42.3 76.9 2.96 36.2 9.19 Less than 5000 pounds 23.1 0.0 3.8 3.8 65.4 0.0 0.0 9 100 TRUCKS Weather 13 1.0 Mile West of S.R. 334 59.9 59.9 8.20 12.0 28.0 0.44 72.0 84.0 96.0 0.09 Last 0.0 0.0 0.0 0.0 9 100 9 Present 62.96 8.93 4.42 81.4 58.4 61.2 10.5 39.5 62.8 93.0 & & 8.8 0.0 0.0 9 3.5 0.0 100 86 53 33 A11 5.74 58.4 22.4 58.4 4.98 8.00 99.2 58.5 58.3 Last 0.0 0.0 0.0 0 0.0 8.0 125 100 53 2 Date Portland Cement Concrete Present 70.7 6.36 40.0 70.5 8 15.2 95.4 70.4 71.0 0.0 0.0 0.0 0.0 0.0 1.0 Non-Indiana 105 0.0 100 45 9 Location 67.7 5.70 65.0 88.6 98.1 67.0 26.7 68.2 Last 0.0 0.0 0.0 0.0 0.0 0.0 1.9 105 6.7 100 747 PASSENGER CARS Present 7.14 19.5 41.9 74.3 94.3 96.7 98.6 69.3 70.1 0.0 0.0 0.0 0.0 0.0 0.5 210 0 8.1 114 96 Indiana - 4:00 p.m. August 8, 1969 Last 62.9 6.06 14.3 37.9 72.4 0.66 99.5 99.5 62.6 95.1 65.8 203 0.0 0.0 0.0 0.5 0.5 3.0 0.5 100 103 This Observation Surface Present 70.32 I-65 73.0 6.89 41.3 93.6 97.1 0.66 9.69 18.1 7.1 0.0 0.0 0.0 0 0.0 0.0 9.0 6.2 159 156 2:25 F 7.66 7.66 66.5 00.9 92.9 66.3 69.2 8.7 2.60 34.1 Last ٢ 7.11 66.7 0.0 0.0 0.0 0.3 0.3 308 M 147 161 Highway d Date Time Average speed (m.p.h. obs. No. of vehicles obs. Standard deviation ho. of vehicles vehicles m.p.h. ORSERVATION 24 m.p.h. m.p.h. 29 m.p.h. m.p.h. m.p.h. m.p.h. 59 n.p.h. 69 m.p.h. 74 m.p.h. 79 m.p.h. m.p.h. 39 m.p.h. m.p.h. Average speed Average speed Q No. of Lanes 75 8 зę JO No Station traveling crea fdev lo & All vehicles pumog



TABLE SPEED DATA

Present 5000 pounds 20.8 43.4 75.5 92.4 98.1 0.0 0 0.0 d 3.8 9.69 9 100 100 00 8 or more 5.57 20.0 0.09 92.3 57.0 Hazy 0.0 58.6 No. B Last 0.0 4.6 8.5 100 65 8 Present Last Previous Observation (Speed Report Date June 28, 1968 20.8 45.8 75.0 91.7 Less than 5000 pounds 0.0 0.0 9 0.0 4.2 °, 8 62.1 66.7 007 100 100 PRUCKS 11 1.0 Mile East of Post Road - 10:30 a.m. 59.5 7,00 26.5 50.0 76.5 91.2 58.9 Last 0.0 0.0 0.0 00 5.9 0.09 100 3 20 61.60 Present 8:00 16.9 36.4 87.0 66.2 60.41 62.5 96.1 0.0 0.0 00 0.0 3.9 100 g 100 4 22.2 56.6 86.9 97.0 0.0 0.0 0.0 3.0 Last 0 59.1 6.1 28 100 8 58 Date Time Concrete Present 72.5 70.8 6.65 16.7 40.8 93.3 99.2 0.69 0.0 0.0 0.0 0.0 120 d ω. Θ 1.7 5.0 Non-Indiana 100 Portland Cement Location 88 68.1 5.94 52.6 4.45 87.2 6.46 98.7 69.2 0.0 Last 0.0 0.0 0.0 0.0 0.0 0.0 5.1 100 PASSENGER CARS Present 9.69 7.96 6.69 73.6 51.4 93.1 20.1 4.69 0.0 0.0 777 0.0 0.7 4.9 0.0 2.1 6.2 2 7 Indiana 9:50 - 12:00 p.m. 1969 62.9 99.9 40.3 71.6 92.2 93.6 Last 12.4 7.8 66.5 243 0.0 0.0 0.0 0.0 5.5 4.39 0.4 5.4 .66 120 123 This Observation Surface August 15, 1-74 Present 70.19 7.41 18.6 9.94 70.8 93.2 88 69.2 0.0 0.0 0.0 00 1.5 5.7 71.1 3.4 131 133 Ā 9.99 6.60 10.6 36.5 91.0 4.66 67.0 97.5 67.2 0.0 0.0 62.6 Last 321 0.0 000 1.9 150 171 H1ghway Date Time Average speed (m.p.h. obs. ops. No. of vehicles obs. Standard deviation vehicles vehicles OESERVATION 24 m.p.h. m.p.h. n.p.h. m.p.h. m.p.h. n.g.n. m.p.h. m.p.h. m.p.h. m.p.h. 29 m. p.h. m.p.h. m.p.h. m.p.h. Average speed Average speed  $\infty$ 59 17 52 No. of Lanes 33 7 617 ळ .;0 o JO uvuq SSOT дe 0 0.1 Station foidev lo & All vehicles purvog mog



TABLE TABLE SPEED DATA	lon 4 Highway I-65 Location 7.5 Miles North S.R. 160	The of Surface Portland	This Observation August 14, 1969 Last Previous Observatione Speed Report No. 86.	1:15 - 2:30 p.m.
	Station	NO.		

					PASSE	PASSENGER CARS					T	TRUCKS		
			,	All	Ind	Indiana	Non-Ir	Non-Indiana		All	Less 5000 r	Less than 5000 pounds	5000 or	pounds nors
	OB	OESERVATION	Last	·Present	Last	Present	Last	Present	Last	Present	Last	Present	Last	Present
	ijo.	ilo. of vehicles obs.	323	283	154	114	691	169	127	104	29	26	98	78
	Avera	Average speed (m.p.h.	8.99	70.25	66.3	9.69	67.2	70.7	58.4		62.2	9.49	57.3	60.3
	Stand	Standard deviation	6.01	16.9	94.9	7.28	5.72	6.32	5.25	7.96	5.33	8.34	4.67	1.57
		24 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		29 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		34 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8		39 т.р.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
т	uet	44 m.p.h.	0.3	0.0	7.0	0.0	0.0	0.0	0.0	1.9	0.0	0.0	0.0	2.6
ŗų	{ <b>7</b>	49 mopoho	9.0	4.0	1.3	6.0	0.0	0.0	4.7	7.7	0.0	3.8	6.1	9.0
9.	886	54 m.p.h.	2.8	1.4	3.9	1.8	1.8	1.2	22.8	18.3	6.90	3,8	27.6	23.1
π	Ţ	59 n.p.h.	11.5	7.1	11.7	7.9	11.2	6.5	53.4	34.6	24.1	56.9	62.2	37.2
Ą			32.5	18.0	37.7	20.2	27.8	16.6	89.8	4.99	65.5	57.7	6.96	69.2
	ĴЕ	1 1	67.2	2.44	69.5	50.0	65.1	40.2	7.88	86.5	93.1	73.1	100	0.16
		74 m.p.h.	92.0	73.1	91.6	75.4	8.36	71.6	100	95.2	100	88.5		4.76
		79 m.p.h.	98.1	92.2	98.1	91.2	88.2	92.9		98.1		92.3		100
		St m.y.h.	100	6.79	100	97.4	100	98.2		100		100		
1		39 m.p.h.		98.9		99.1		98.8						
un	No. o	No. of vehicles Obs.	146	141	65	62	81	79	52	61	16	13	36	84
Bo	Avera	Average speed	67.3	70.5	66.7	70.1	2.79	70.9	59.0	62.1	62.4	65.8	57.5	61.1
pur	I.O. 0	No. of vehicles obs.	177	142	89	52	88	8	75	43	13	13	62	30
noe	Avera	Avera je speed	4.99	70.0	0.99	69.1	8.99	70.5	58.0	4.09	62.0	63.5	57.1	59.0

1.2 Miles South of S.R. 38	rete Weather Cloudy Last Previous Observation (Speed Report No. 86.)	Date June 26, 1968 Time 1:30 - 4:30 p.m.
Location	Asphalt Conc	1
U.S. 31	Josephalon Surface	12:35 - 5:15 p.m.
5 Highway	This Observat	Date
Station	No. of Lanes	•

SPEED DATA

TABLE

					PASSE	PASSENGER CARS					1	TRUCKS		
			_	ALL	Ind	Indiana	Non-In	Non-Indiana	,	All	Les:	Less than 5000 pounds	5000	OC pounds
	OE	OESERVATION	Last	Present	Last	Present	Last	Present	Last	Present	Last	Present	Last	Present
	ilo. o	ilo. of vehicles obs.	277	289	227	543	50	94	85	109	38	742	747	67
	Avera	Average speed (m.p.h.	64.7	69.21	64.3	69.2	66.2	69.2	56.4	61.52	59.1	62.9	54.3	58.8
	Stand	Standard deviation	7.00	7.13	7.11	7.35	6.19	5.95	6.75	8.15	6.92	8.74	5.83	6.43
		24 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	1	29 mepshe	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		34 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
61	1	39 m.p.h.	4.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0 0	0 0	C
ЭТС	JSTJ FAG	44 m.p.h.	1.1	0.0	1.3	0.0	0.0	0.0	5.9	6.0	5.6	0.0	8.5	1.5
ru	17	49 mopoho	2.2	0.4	2.2	4.0	2.0	0.0	16.5	5.5	10.5	8.4	21.3	6.0
ΘΛ	988	54 m.p.h.	6.1	2,1	7.1	2.5	2.0	0.0	37.7	18.4	23.7	9.5	48.9	23.9
TT	To:	59 n.p.h.	20.6	10.4	22.0	12.4	14.0	0.0	71.8	45.0	52.6	21.4	87.2	59.7
7	ide io	of med h.	8.64	22.2	52.0	23.0	0.04	17.4	87.1	62.4	76.3	45.2	95.7	73.1
	3£	69 m.p.h.	16.9	52.2	79.7	9.05	64.0	6.09	96.5	83.5	92.1	64.3	100	95.5
	0 9	74 m.p.h.	94.2	78.6	93.8	4.77	0.96	8,48	100	92.7	100	83.3		98.5
		79 п.р.ћ.	28.2	92.7	8.76	93.0	100	91.3		98.2		95.2		100
		84 m. p.h.	99.5	28.3	99.1	6.76		100		99.1		9.76		
1		% ш.р.h.	100	100	100	10.0			٠	100		100		
un	1,0.0	of vehicles obs.	124	151	106	127	18	24	29	88	13	29	16	39
nai	Avera	Average speed	65.0	70.3	9.49	70.5	67.7	69.5	56.8	65.9	58.9	65.7	55.1	6.09
	0.071	no. of vehicles obs.	153	138	12	116	32	22	95	T†7	25	13	31	28
nog	Avera	Avera je speed	4.49	68.0	64.1	6.79	65.4	63.8	2.95	59.2	59.5	66.5	53.8	55.8

		. 9		U.S.	52		<u> </u>	יין און עמיינט יין	, L : 34	9	ć ć			
tai	Station	Highway	WAY				Location	u u	T'O MITE	E85 01 5	D. R. CO		Official	A
. 0.	No. of Lanes	This 0	bservation Date	of Surface July 31,	ce 31, 1969		Asphaltic Concrete	ncrete st Previo	nus Obs	38	Ne Ne		No.	86_)
		Time	9	9:45	- 12:30	p.m.	1	Ţ	Time	1:00 - 3:	3:00 p.m.			
					PASSE	PASSENGER CARS						TRUCKS		
				TT-V	Ind	Indiana	Non-L	Non-Indiana		LLA	Lese	Less than 5000 pounds	5000	5000 pounds
	OB	OBSERVATION	Last	Present	Last	Present	Last	Present	Last	Present	Last	Present	Last	Present
	o oi	ilo. of vehicles obs.	308	251	196	124	112	127	20	137	12	35	58	102
	Avera	Average speed (m.p.h.	62.9	70.20	65.1	9.07	67.1	8.69	55.3	61.19	59.7	64.8	54.3	59.9
	Stand	Standard deviation	5.48	6.33	5.45	64.9	5.33	91.9	6.25	6.44	6.89	6.85	5.76	5.83
		24 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		29 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.0.0	0.0	0.0	0.0
		34 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8		39 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.7	0.0	0.0	1.7	1.0
eT:	uet	44 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	5.9	0.7	0.0	0.0	3.5	1.0
ŗų	13	49 mopoho	0.0	4.0	0.0	0.0	0.0	9.0	15.7	5.9	8.3	2.9	17.2	5.9
91	888	54 m.p.h.	2.3	1.2	3.1	0.0	6.0	7.4	47.1	15.3	25.0	14.3	51.7	15.7
77	T .	59 m.p.h.	10.4	5.6	12.2	5.6	7.1	5.5	77.4	38.7	41.7	22.9	9.77	44.1
7	to tue	64. m.p.h.	6.14	14.3	48.5	14.5	30.4	14.2	94.3	4.99	75.0	31.4	98.3	78.4
	36	69 m.p.h.	74.0	43.0	77.6	4.44	6.79	41.7	100	92.7	100	77.1	100	98.0
	:0 9	74 m.p.h.	95.5	78.9	6.96	75.0	92.9	82.7		98.5		94.3		100
		79 m.p.h.	99.0	95.8	99.5	91.1	98.2	24.5		100		100		
		84 m.p.h.	7.66	98.8	99.5	9.76	100	100						
1		Sy m.p.h.	100	100	100	100								
um	1,00	of vehicles obs.	148	123	105	62	43	61	32	775	†	25	28	50
Bo	Avera	Average speed	9.99	71.2	65.8	4.17	68.5	71.0	56.8	63.4	58.8	65.8	56.5	62.2
pu	.o.	of vehicles obs.	160	128	91	62	69	99	88	62	œ	10	30	52
rio	Avera	Avera 'e speed	55.2	69.2	4.49	6.69	66.3	9.89	54.0	58.6	7.09	62.5	52.3	57.8

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SPEED DATA

TABLE



.R. 2	Neather   Cloudy   1968   Neather   Cloudy   1968   Neather   Ne	TRUCKS	Less than 5000 pounds 5000 pounds	t Las	16 26 86 103	57.0 61.2 55.2 54.7	6.56 8.99 7.32 7.09	0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 1.2 2.9	0.0 3.8 12.8 7.8	12.5 11.5 22.1 19.4	37.5 19.2 40.7 43.7	56.3 38.5 68.6 77.7	87.5 65.4 91.9 92.2	100 88.5 98.8 99.0	92.3 100 100	96.2	100		16 43	0 61.1 50.9	10 10 43 51	57.0 61.4 59.4 56.4
NATA 1.0 Mile North of S.	bservation July 1 2:00 - 1		LTA	Last Present	102 129	55.4 56.04	7.21 7.92	0.0 0.0	0.0 0.0	0.0 0.0	1.0 2.3	10.8 7.0	20.6 17.8	40.2 38.8	8.69 7.99	91.2 8.68	99.0 96.9	100 98.4	99.2	100			9.		59.0 57.2
E	Cement Concrete Last Previous O Date Time		Non-Indiana	Present	118	1 68.2	40.8	0.0	0.0	0.0	0.0	2.5	4.2	5.1	0.01	23.8	55.9	7.67	0 91.5	2.66	100	L	_	57	6.99
E SP	Portland C	R CARS		Present Last	136 100	6	8.14 5.80	0.0 0.0	0.0 0.0	0.0 0.0	0.0	0.7	2.2 0.0	8.8 3.0	19.1 17.0	41.2 48.0	69.1 79.0	90.4 93.0	96.3 97.0	99.3 99.0	99.3		5.	70 53	65.5 65.2
TABLE 41	ace 6, 1969 2:15 p.m.	PASSENGER CARS	Indiana	Last	152	6	6.31	0.0	0.0	0.0		0.7	3.3	8 6.6	19.7				98.0	100	0	L	6.		62.8
U.S.	bate 10:45 - 2:		ALI.	t Present	2 25h		6.20 8.16	0.0	0.0	0.0	0.0	4 1.6		7.1	.7 15.0	.1 33.1		4. 85.4	.6 94.1				_	_	8 66.2
Station 7 Highing	lanes This C			ORSERVATION Last	No. of vehicles obs.   252	Average speed (m.p.h. 63.8	tion	24 m.p.h. 0.0	29 m.p.h. 0.0		ŢŢ		tr 17	8 8 54 пороно	ਤੋਂ ਤੋਂ 59 ਸ•p•h•	o to me pehe	d 69 m.p.h.	74 m.p.h.	79 m.p.h.			Ho. of vehicles obs. 130	Average speed	g Lo. of vehicles obs. 122	S Averare speed 63.8



DATA	
SPEED	
ω	
TABLE	

Last Previous Obsernation (Speed Report No. Date 9:30 a.m. - 12:00 p.m. 1.0 Mile West of Klondike Date \_\_\_\_ Asphalficationerete 1:35 - 2:45 p.m. This Observation July 30, 1969 U.S. 52 Highway Date Time  $\infty$ No. of Lanes Stat1on

				PASSE.	PASSENGER CARS					-	TRUCKS		
		,	All	Ind	Indiana	Non-Ir	Non-Indiana		All	1.685 5000	Less than 5000 pounds	5000 20	5000 pounds
OE	ORSERVATION	Last	Present	Last	Present	Last	Present	Last	Present	Last	Present	Last	Present
io. o	No. of vehicles obs.	566	284	153	167	213	117	101	109	25	27	92	82
vera	Average speed (m.p.h.	65.1	65.49	64.3	64.9	2.99	66.3	57.3	00.09	57.6	62.4	57.1	59.5
tand		5.74	7.92	5.88	8,34	5.34	7.22	7.2	7.15	8.26	9.60	6.82	6.02
	24 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	29 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	34 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	39 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	1.0	6.0	0.0	3.7	1.3	0.0
uet	44 m.p.h.	0.0	0.7	0.0	1.2	0.0	0.0	5.0	6.0	8.0	3.7	4.0	0.0
17	49 mopoho	8.0	3.2	7.0	3.6	6.0	2.6	14.9	4.9	16.0	14.8	14.5	3.7
S88	54 m.p.h.	4.1	8.4	5.9	11.4	1.8	4.3	33.7	18.4	36.0	18.5	32.9	18.3
η.	59 m.p.h.	12.0	18.3	15.7	21.0	7.1	14.5	52.5	50.5	52.0	33.3	52.6	56.1
10	64 m.p.h.	7.94	39.8	54.9	43.7	34.5	34.2	87.1	73.4	76.0	51.8	8.06	80.5
3£	69 т.р.h.	76.3	73.2	78.4	73.6	73.5	72.6	94.1	86.2	92.0	70.4	94.7	91.5
	74 m.p.h.	0.76	91.9	0.86	92.2	92.6	91.4	100	97.2	100	9.36	100	98.8
	79 т.р.ћ.	98.5	95.4	98.7	95.8	98.2	6.46		100		100		100
	84 m.p.h.	100	9.66	100	4.66	100	100						
	99 т.р. h.		9.66		4.66								
0	No. of vehicles obs.	122	140	77	81	45	59	35	95	6	14	56	75
Vera	kverage speed	65.5	66.2	4.49	9.59	67.3	67.1	56.8	61.0	56.1	61.4	57.0	60.8
0	40. of vehicles obs.	1777	144	92	98	89	58	99	53	16	13	50	40
710 71	CITOTIC CO COLONIA	Z 17	α	C 1/2	64.2	עב ב	65 5	5	000	7	17 7 7	7	2.7.5



DATA	
SPEED	
6	
TABLE	

	Highway	U.S.	41		0		O Mile	1.0 Mile North of	Boswell	11		
This Of	hservati Date Time	Observation July 17.  Date 10:20 - Time	1969	Portland	d Cement Last -	Concr Previ		Observation June 21 9:00 -	Veathor   Veat	ort	Hazy No. 86	
			PASSEMGER	IGER CARS						TRUCKS		
		ALL	Ind	Indiana	llon-Ir	Non-Indiana		A11	Less 5000	Less than 000 pounds	5000	pounds
WCI TA VH LONG	Last	Present	Last	Present	Last	Present	Last	Present	Last	Present	Last	Present
.o. of venicles obs.	247	250	145	122	102	128	106	146	40	49	99	26
Average speed (m.p.	p.h. 59.5	63.46	58.7	62.6	60.7	64.3	53.8	57.53	52.8	59.5	54.0	56.5
Standard deviation			7.91	8.09	5.91	6.97	6.13	7.91	7.22	7.77	5.37	7.83
24 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.0.0	0.0	0.0	0.0
34 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	6.0	0.0	2.5	0.0	0.0	0.0
m.p.h.	0.0	4.0	0.0	8.0	0.0	0.0	1.9	2.0	5.0	0.0	0.0	3.1
44 m.p.h.	2.01.	o.	3.5	3.3	0.0	0.0	9.7	5.48	10.0	0.0	6.1	8.2
n.op.h.	9.3	8.4	13.1	7.4	3.92	2.3	22.6	14.4	25.0	10.2	21.2	16.5
m.p.h.	24.7	12.8	30.3	17.2	16.7	9.8	55.7	32.9	57.5	22.4	54.6	38.1
m.p.h.	47.0	26.0	51.0	29.5	41.2	22.7	82.1	58.9	82.5	57.1	81.8	59.8
C, m co.h.	75.7	53.6	77.9	54.1	72.6	53.1	8.1	83.6	97.5	75.5	8.5	87.6
m.p.h.	92.3	-	90.3	82.8	95.1	77.3	100	93.8	100	89.8	100	95.9
74 m.p.h.	99.5	4.46	9.86	62.6	100	93.0		98.0		93.9		100
m.p.h.	9.66	99.2	99.3	100		7:%		99.3		98.0		
84 m.p.h.	100	100	100			100		100		100		
39 m.p.h.												
vehicles obs.	121	128	09	61	61	29	09	82	21	33	39	64
Average speed	60.7	62.3	60.3	61.5	61.2	63.0	54.0	56.3	52.7	58.8	54.8	9.45
io. of vehicles obs.	125	122	84	61	41	61	94	75	19	76	27	\$
Avera je speed	58.5	64.7	57.8	63.7	59.9	65.7	52.9	59.1	52.9	61.0	52.9	50.5



TABLE 10 SPEED DATA

Present 5000 pounds 98.3 52.4 9.96 55.3 0.0 0.0 0.0 0.0 0.0 3.4 55.3 100 or more 30 50 Cloudy Neather Clou last Previous Observation (Speed Report No. 85 Date June 21, 1968 48.9 26.7 75.6 91.1 9.95 9 Last 0.0 0.0 0.0 0.0 4.4 100 52.5 2,4 22 Present Less than 5000 pounds 64.0 7.88 31.7 51.7 73.3 93.3 7.96 64.2 11.7 **TRUCKS** 0.0 0.0 0.0 0.0 0.0 63.8 3.3 200 62 9 2.0 Miles South of Chalmers 2:00 - 5:00 p.m. 97.0 97.0 55.6 8.36 48.5 9.09 87.9 12.1 24.2 54.2 Last .0.0 0.0 0.0 0.0 100 57.7 33 20 13 Present 59.67 7.69 31.9 74.0 9.96 59.8 85.7 56.3 59.6 0.0 0.0 0.0 0.0 0.0 3.4 910 100 86 28 61 F 55.0 7.50 25.6 48.7 69.2 7:8 98.7 55.5 Last 0.0 0.0 0.0 7.7 89. 35 0.0 100 Date Time 29 43 Present 67.8 26.3 7.70 21.0 52.6 84.2 7.46 65,8 Non-Indiana 71.4 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Asphaltic Concrete 100 12 ~ Last 64.2 7.43 12.2 22.0 48.8 78.1 92.7 9.76 63.7 0.0 0.0 0.0 0.0 0.0 2.4 64.8 100 23 78 41 PASSENGER CARS Present 6.99 9.25 39.3 62.0 82.2 93.0 98.1 0.99 10.7 19.8 0.0 0.0 0.0 0.0 ο. 8 67.6 4.0 130 242 Indiana 2:30 p.m. 43 Last 62.6 7.97 82.5 91.8 97.1 8.8 99.2 1969 15.5 32.7 64.1 4.19 U.S. 54.2 245 0.0 0.0 0.0 0.0 7.5 4.1 140 105 This Observation Surface July 22, Present 66.95 10.0 19.9 61.3 82.4 97.3 0.99 38.3 93.1 67.8 0.0 0.0 0.0 0.0 0,8 10:20 4.0 124 137 261 7 7.90 81.8 92.0 99.0 62.8 15.0 61.9 97.2 61.7 Last 31.1 34.3 286 0.0 0.0 0.0 30 0.0 7.7 163 Highway Date Time Average speed (m.p.h. obs. obs. ino. of vehicles obs. Standard deviation i.o. of vehicles vehicles m.p.h. m.p.h. m.p.h. n. p. h. 74 m.p.h. OBSERVATION 24 m.p.h. 29 m.p.h. m.p.h. m.p.h. ч°с •ш m.p.h. n.p.h. n.p.h. m.p.h. Average speed Average speed 2 No. of Lanes 33 7 57 8 reut Tess ĴЕ JO 0 Station Aepro JO 9 pumog All vehicles



DATA
SPEED
77
TABLE

	udy 		OC pounds	Present	55	57.4	6.58	0.0	0.0	0.0	1.8	3.6	14.6	25.4	52.7	89.1	98.2	100				24	59.1	31	56.2					
	Cloudy No		5000	Last	52	54.6	5.36	0.0	0.0	0.0	0 0	1.9	15.1	50.9	83.0	96.2	100					19	56.1	34	53.8					
		TRUCKS	Less than 5000 pounds	Present	113	57.9	8.09	0.0	0.0	2.3	2.3	7.0	7.0	32.6	60.5	79.1	95.4	97.7	100			20	₹65	23	56.6					
of Rochester	Ne Ne (Speed 1988 1988 1988 1988 1988 1988 1988 198		Les:	Last	21	54.6	8.34	0.0	2.2	4.4	6.7	6.7	22.2	46.7	66.7	91,1	100					17	54.2	28	54.8					
South of	Observation (Speed Report June 24, 1968	1	All	Present	98	57.6	7.24	0.0	0.0	1.0	2.0	5 1	11.2	28.6	56.1	84.7	96.9	9.90	100			44	59.2	54	56.4					
3.0 Miles				Last	98	54.6	6.85	0.0	1.0	2.0	3.1	7	18.4	0.64	75.5	93.9	100					36	55.2	62	54.2					
	TX.		Non-Indiana	Present	179	64.7	6.42	0.0	0.0	0.0	0.0	0.0	0.0	6.2	25.0	48.4	9.92	95.3	98.4	100		26	63.8		65.3					
Location	ic Con Lat		Non-I	Last	73	63.5	7.21	0.0	0.0	0.0	0.0	4.1	2.7	8.2	24.7	54.8	89.0	94.5	95.9	98.6	100	43	63.6	30	63.4					
-	Asphal.m.	NGER CARS	Indiana	Present	1.76	0.40	7.41	0.0	0.0	0.0	9.0	1.1	2.8	9.1	22.7	53.4	78.4	95.6	98.3	100		84	9.49		63.5					
31	196	PASSENGER	Ind	Last	209	61.2	6.96	0.0	0.0	0.0	0.5	6.1	5.3	14.4	23.9	74.2	90.9	98.6	99.0	0.66	39.5	77	52.0	12	60.5					
u.s.	Observation Surface Date 10:25 - 2								All	Present	240	64.19	7.16	0.0	0.0	0.0	0.4	0.8	2.1	8.3	23.3	52.1	77.9	93.3	98.3	100		110	64.4	130
Wav	Typeof			Last	282	61.8	7.09	0.0	0.0	0.0	7.0	8	9.4	12.8	32.2	69.2	90.4	97.5	98.2	98.9	7.66	077	62.5	1,42	0.19					
Station 11 Highway	No. of Lanes This Obser' Date			OESERVATION	ilo. of vehicles obs.	Average speed (m.p.h.	Standard deviation	24 m.p.h.	29 n.p.h.	% 34 m.p.h.	iĮ:	TAG	ri	SSe	Ĺsi	3 10 148	3E	0 74 m.p.h.	79 m.p.h.	84 m.p.h.	39 m.p.h.	5 No. of vehicles obs.	peeds eggrevy	g no. of vehicles obs.	Average speed					



TABLE 12 SPEED DATA

Present 5000 pounds 6.46 6.31 76.3 96.6 18.6 54.2 0.0 0.0 0,0 or more 100 Concrete Meather Hazy Last Previous Observation (Speed Report No. 86 Data June 24, 19682.8 63.9 Last 53.2 22.2 83.3 97.2 97.2 55.3 51.1 0.0 0.0 0.0 0.0 2 100 36 18 - 12:30 p.m. Present Less than 5000 pounds 59.5 57.8 75.6 97.8 82.7 9.41 61.1 **TRUCKS** 57.1 0.0 0.0 0.0 7.7 6.7 26. 91. 138 27 0.7 Miles West of Americus Last 54.9 7.17 11.4 40.0 22.8 71.4 94.3 6.45 0.0 0.0 54.9 0.0 0 100 9 10:00 a.m. 17 18 Present 56.50 8.19 86.5 4.06 13.5 41.4 68.3 86.2 0.66 63 55.5 0.0 9 0.0 707 0.0 8.4 닼 4 54.0 6.57 Last 22,5 52.1 95.8 98.6 55.1 52.9 0.0 0.0 0.0 7.0 100 100 Time 36 35 Present Asphaltic Concrete 8.76 16.7 22.2 50.0 77.8 83.3 Non-Indiana 11,1 65.5  $\infty$ 0.0 0.0 0.0 0.0 0.0 100 18 8 Location 31 Last 29.0 61.3 90.3 96.8 62.1 63.9 0.0 0.0 0.0 0.0 0.0 3.2 3.5 100 16 15 PASSENGER CARS Present 63.9 7.54 91.2 11.5 24.42 8.8 98.2 99.5 56.2 63.6 64.1 0.0 0.0 0.0 0.0 6.0 1.8 100 116 101 Indiana - 12:30 p.m. August 18, 1969 Last S.R. 25 46.9 41.9 38.7 35.2 6.86 7.19 51.3 0.0 0.0 186 0.0 7.7 0.0 0.0 7 8 4 This Observation Surface Present 7.62 11.9 9.66 9.0 8 24.3 78.7 63.5 0.0 64.2 235 0.0 0.0 0.0 0.0 5.6 100 105 00:6 4 61.7 Last 5.79 9.60 88.9 10.1 72.4 99.1 51.5 0.0 5.7 0.0 217 0.0 0.0 0  $\infty$ 00 90 Highway Date Time Average speed (m.p.h. obs. No. of vehicles obs. obg. Standard deviation ho. of vehicles vehicles m.p.h. 24 m.p.h. ш.р.h. 74 m.p.h. n.p.h. m.p.h. OBSERVATION 29 m.p.h. m.p.h. m.p.h. 59 m.p.h. ol, m.p.h. 69 m.p.h. m.p.h. m.p.h. Average speed Average speed 122 7 617 54 No. of Lanes 섫 33 7 62 աթկդ Tess 35 001 Station Erraveling ACPTCTOR 3 ŢO All vehicles mog puriog



			on .	int		6	.3	_			_			1	6	5	6	1			
1			5000 pounds	Present	255	59.9	7.13	0.0	0.0	0.0	0.0	1.6	7.8	23.1	43.9	72.2	6.56	4.86	100		
No.			5000	Last	ተተ8	57.9	5.23	0.0	0.0	0.0	0.3	1.5	6.1	22.7	59.9	6° <b>1</b> 6	2.66	7.66	100		
		TRUCKS	Less than 5000 pounds	Present	96	65.3	8.11	0.0	0.0	0.0	0.0	1.0	3.1	7.3	21.9	45.8	67.7	85.4	95.8	0.66	100
Speed		F,	Less	Last	100	60.5	7.27	0.0	0.0	0.0	0.0	1.0	6.0	20.0	45.0	72.0	90.0	98.0	0.66	100	
Weather Observation (Speed Report	•		A11	Present	351	61.36	7.79	0.0	0.0	0.0	0.0	1.4	9.9	18.8	37.9	65.0	86.0	6.46	98.9	7.66	100
ous Obse	Time		A	Last	<del>ተ</del>	58.5	5.85	0.0	0.0	0.0	0.2	1.4	6.1	22.1	6.55	4.78	97.5	99.3	8.66	100	
Last Previous Date			diana	Present	1,95	71.2	6.75	0.0	0.0	0.0	0.0	0.0	0.2	1.4	5.9	15.6	37.8	67.3	90.5	97.8	99.6
Las			Non-Indiana	Last	924	6.79	5.98	0.0	0.0	0.0	0.0	0.0	0.2	1.9	8.7	26.8	9.65	89.2	96.7	8.66	100
		PASSENGER CARS	Indiana	Present	615	70.2	7.20	0.0	0.0	0.0	0.0	0.2	9.0	1.6	7.2	18.2	45.4	73.3	4.26	97.1	7.86
e.		PASSE	Ind	Last	742	66.1	6.34	0.0	0.0	0.0	0.1	0.7	1.5	4.2	12.1	37.5	71.0	93.0	98.5	7.66	99.7
bservation Surface Date			All	Present	1110	70.62	7.07	0.0	0.0	0.0	0.0	0.1	0.4	1.5	9.9	17.0	42.1	9.07	91.5	4.76	1.66
resto.	U U		1	Last	1168	8.99	6.26	0.0	0.0	0.0	0.1	0.4	1.0	3.3	10.9	33.4	6.99	91.6	6.76	7.66	8.66
No. of Lanes This Obser' Date	Time			OBSERVATION	No. of vehicles obs.	Average speed (m.p.h.	Standard deviation	24 m.p.h.	29 mepohe			ret	15 to 49 mopoho	9 8 54 m.p.h.	7	IO.	3£	74 m.p.h.		84 mepehe	89 мерене
Q			zeloinev LIA																		

See Individual Stations

SPEED DATA

13

TABLE

Interstate

Highway

1, 2, 3, 4

Station I.

Location



TABLE 14 SPEED DATA

Present 100.0 5000 pounds 58.0 26.0 7.66 0.0 0.0 8.5 000 or more Last Previous Observation (Speed Report No. 86 100.0 55.4 6.68 18.7 42.3 70.8 Last 93.6 28 0.0 0.0 267 C Present 100.0 5000 pounds 64.0 8.62 14.6 27.7 46.9 73.8 0.06 1.16 99.2 Less than PRUCKS 130 0.0 0.0 0.0 Weather 8.0 Last 100.0 58.4 7,20 7.62 78.0 12.1 94.5 See Individual Stations 0.0 0.0 0.0 0.0 6 Present 59.65 100.0 22.9 6.96 8.66 72.5 8.3 4.66 0.0 0.0 0.0 8.3 184 1.0 3 AL1 100.0 56.2 17.0 62.6 Last 6.93 89.7 97.2 39.1 0.0 358 0.0 0.0 0.8 Date Present 100.0 68.2 9,48 8.66 23.0 7.14 93.4 Non-Indiana 0.0 708 0.0 0.0 ω ∞ 5.5 7.7 Location 100.0 Last 66.2 7.46 7.66 5.61 37.6 72.0 88.1 375 0.0 0.0 0.0 0.0 0.5 1.9 PASSENCER CARS Present 0.48 7.66 67.7 83.3 88.5 7.94 14.6 30,3 59.0 0.0 0.0 0.0 0.0 1.5 5.5 670 Indiana Last 100,0 0.96 98.5 6.66 64.2 18.0 54.7 80.7 6.31 0.0 728 0.0 0.0 1.5 4 lanes This Observation Surface Present 67.93 83.8 93.8 0.66 7.65 58.2 1078 12.4 99.8 0.0 0.0 0.0 4.7 0 4 Last 100.0 92.6 1103 6.49 6.15 15.7 48.9 8.77 4.86 8.66 0.0 0.0 0.0 8. 1.2 0.1 Highway Time Date Average speed (m.p.h. No. of vehicles obs. Standard deviation Station 5,6,7, & 8 OBSERVATION 24 m.p.h. 34 m.p.h. m.p.h. 29 m.p.h. m.p.h. 49 mopoho m.p.h. 59 m.p.h. 64 m.p.h. 69 ш.р.н. 74 m.p.h. 79 m.p.h. 84 m.p.h. S9 mepeh No. of Lanes 27 than Jess JO 7.6 gnilevert % of vehicles All vehicles



TABLE 15 SPEED DATA

			apı	Present	270	55.9	6.67	0.0	0.0	0.0	80	4.8	13.7	41.8	66.7	1.5	97.0	100			
	(Speed Report No. 86)		5000 pounds or more	-							7					0 91					
			500	Last	200	54.2	5.79	0.0	0.0	0.0	0.0	4.0	21.0	54.0	81.0	0.96	99.5	100			
		TRUCKS	Less than 5000 pounds	Present	197	60.5	8.55	0.0	0.0	0.5	1.0	2.5	9.9	22.3	50.2	69.0	84.3	93.9	98.0	100	
tions	Speed		Les:	Last	153	54.4	7.80	0.0	0.7	2.0	3.9	9.8	23.5	4.84	70.6	95.8	4.66	4.66	100		
See Individual Stations	rvation (		LIA	Present	194	57.87	7.84	0.0	0.0	0.2	1.5	3.8	10.7	33.6	59.7	82.0	91.6	4.76	99.1	100	
Indivi	ous Obse Date		A	Last	353	54.3	6.72	0.0	0.3	0.9	1.7	6.5	22.1	51.6	76.9	94.6	4.66	99.7	100		
	A.		diana	Present	229	64.6	7.06	0.0	0.0	0.0	0.0	0.0	2.2	7.9	23.1	49.3	75.1	92.1	98.2	100	
Location	Las	GER CARS	Non-Indiana	Last	242	62.4	69.9	0.0	0.0	0.0	0.0	0.4	3,2	11.7	31.6	61.9	89.9	96.8	7.86	9.66	100
1			PASSENGER CARS	Indiana	Present	757	64.7	8.31	0.0	0.0	0.0	0.3	1.2	2.6	11.6	23,4	49.8	74.0	4.68	96.8	98.9
20	υ	PASSE	Ind	Last	785	61.2	7.57	0.0	0.0	0.0	0.1	1.5	5.7	18.5	38.9	71.0	87.6	95.7	98.5	4.66	9.66
2 lanes	Observation Surface Date		AL A	Present	986	64.65	8.04	0.0	0.0	0.0	0.2	0.0	2.5	10.8	23.3	49.7	74.2	90.1	97.2	99.2	9 66
खर	Typeon		A	Last	1032	61.5	7.38	0.0	0.0	0.0	0.1	1,3	5,1	16.9	37.1	68.8	88.2	95.9	98.5	1, 66	7 66
Station 9,10,11,12 Highway	No. of Lanes This Obsert Date Time			OESERVATION	No. of vehicles obs.	Average speed (m.p.h.	Standard deviation	24 m.p.h.	29 m.p.h.		7 39 m.p.h.	uei	t to mopoho	w w 54 m.p.h.	of d 59 m•p•h•	6 64 m.p.h.	4 69 m.p.h.	o 74 m.p.h.	79 m.p.h.	84 m.p.h.	89 m.p.h.
Stati	No. 0						IL.							ΘΛ							



TABLE

Present 57.92 6.98 30.0 57.2 82.0 92.6 99.3 5000 pounds 0.0 0.0 879 6.6 or more 56.2 13.9 36.9 93.5 6.08 68.7 90.1 Last 0.0 0.0 0.0 0.5 811 Last Previous Observation (Speed Report No. Present 62.66 8.70 90.8 36.9 57.0 5000 pounds 0.0 0.0 1.9 0.2 Less than 0.7 6.2 TRUCKS Weather 57.2 7,93 57.3 82.8 95.4 See Individual Station Last 15.4 99.1 0.0 0.3 0.9 344 5.5 35 Present 59.46 7,90 50.6 73.9 89.6 8.5 1302 0.0 0.0 6.0 2.7 8.7 0.1 25 F 1155 56.5 6.70 14.4 36.4 65.3 8.3 0.8 26.4 Last 0.0 0.3 6.0 4.5 0.1 Date Present 68.79 1132 7.38 10.4 52.2 78.5 25.1 0.0 0 0.0 0.0 Non-Indiana 0.3 Location 0.99 6:30 6:36 1048 38.7 71.2 15.0 Last 0 0.0 0.0 0.0 0.0 7.5 0.1 PASSENGER CARS Last Present 67.33 82.6 2042 8.21 15.6 33.9 60.5 0.0 0.0 0.0 9.0 1.7 0.1 Indiana 63.8 80.0 94.9 54.7 2255 7,08 All Systems 8 0.0 0.0 0.0 6.0 3.0 0.1 23. This Observation Surface Present 67.85 30.8 7,95 13.8 57.5 81.1 3174 0.0 0.0 0.0 5,5 0.5 5.5 7 64.5 9.64 94.3 3303 6.94 77.2 Last 0.0 0.0 0.0 0.7 2.4 20. 0.1 8.1 Highway Date Time Average speed (m.p.h. No. of vehicles obs. Standard deviation Station 1 Thru 12 OBSERVATION 24 m.p.h. m.p.h. m.p.h. 69 m.p.h. 74 m.p.h. 29 m. p.h. m.p.h. m.p.h. mop.h. m.poh. m.p.h. 65 No. of Lanes な эţ Tesa JO rpan gnileveling % of vehicles

100

100

4.46 99.5

99.7

366 8.66

6.66

93.1 98.9 8.66

9.76

9.45

8.5

0.4 98.5 99.5

98.2

m.p.h.

All vehicles

m.p.h. m.p.h.

र्ख 85

99.7

98.2 8

7.66

100

99.8

99.8

99.7

100

200

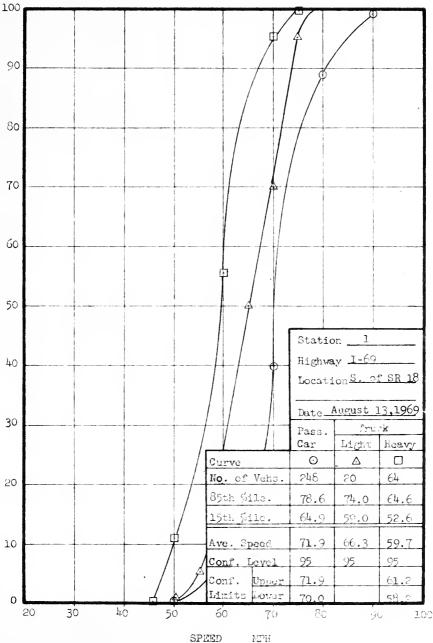
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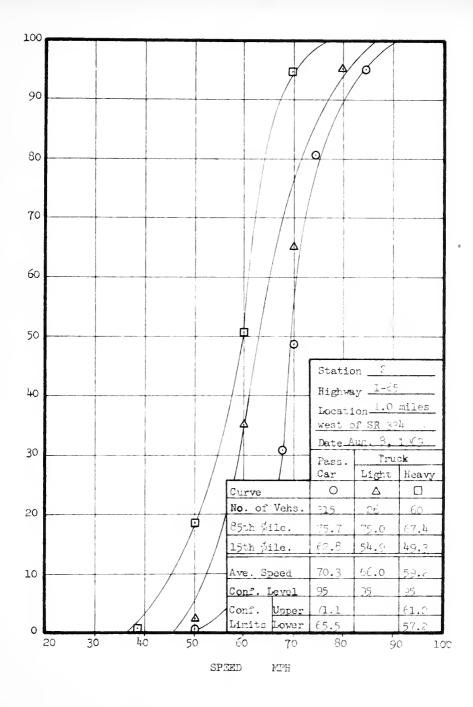
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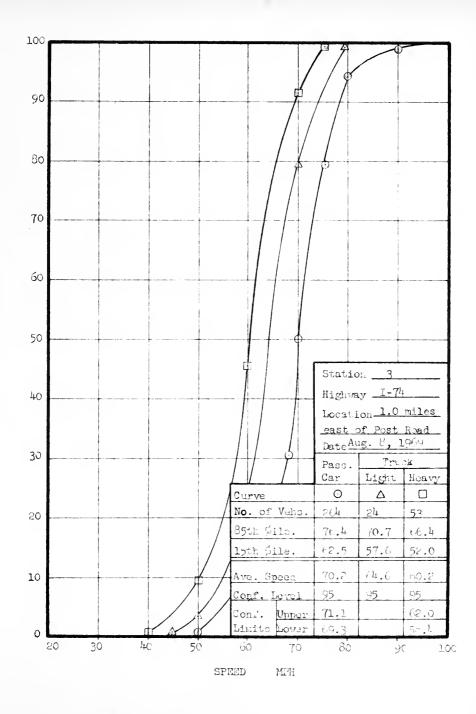




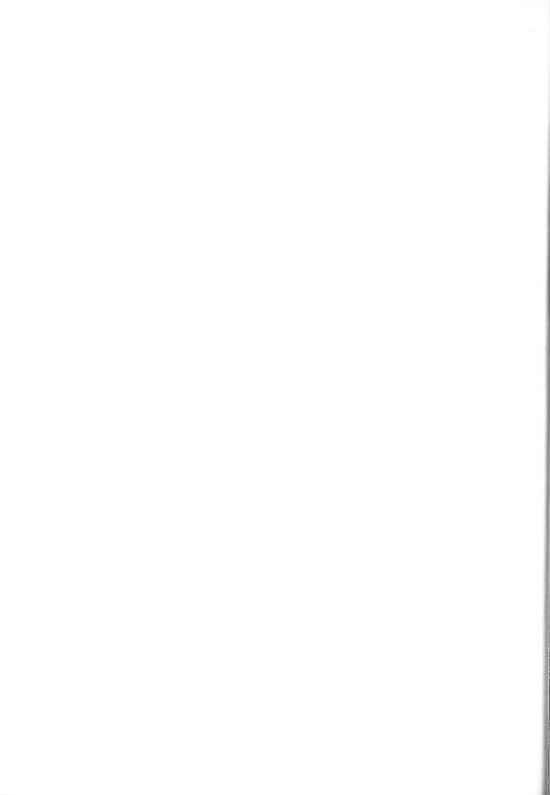


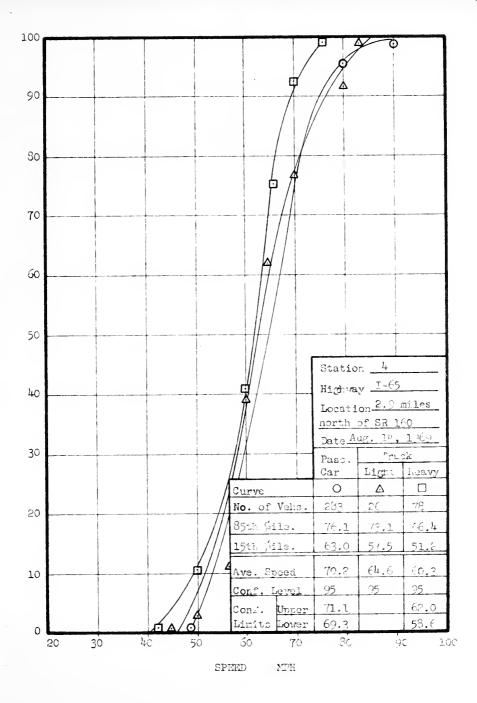
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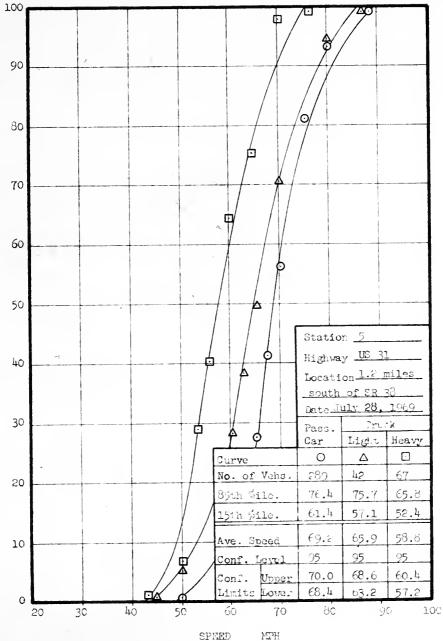
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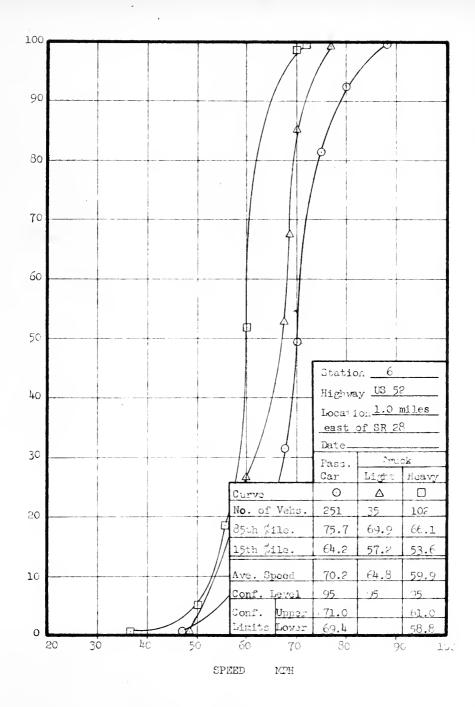


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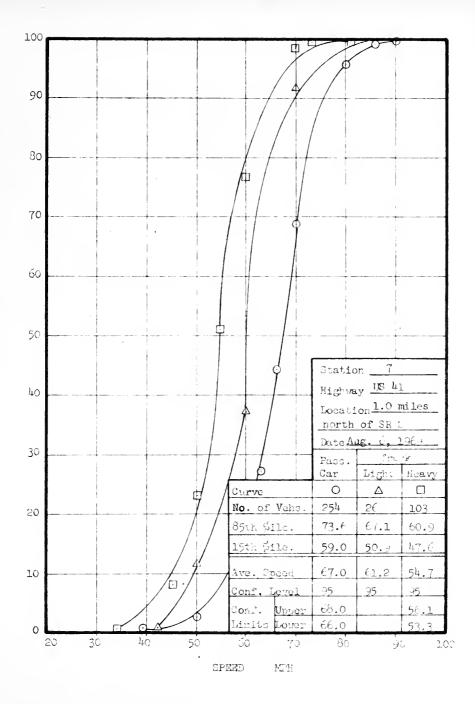




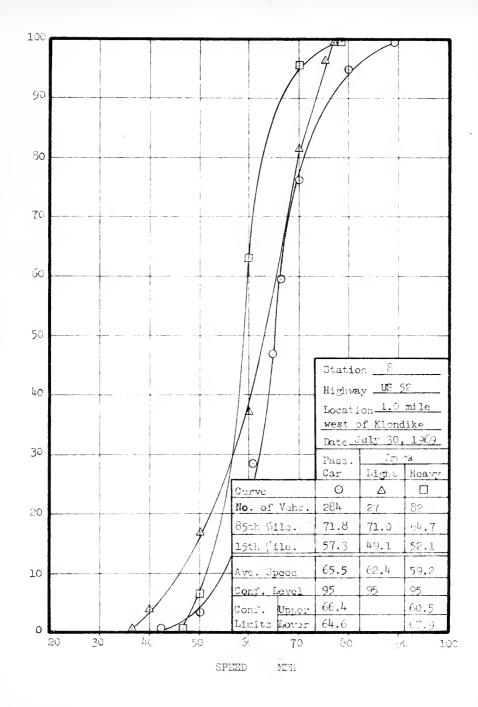






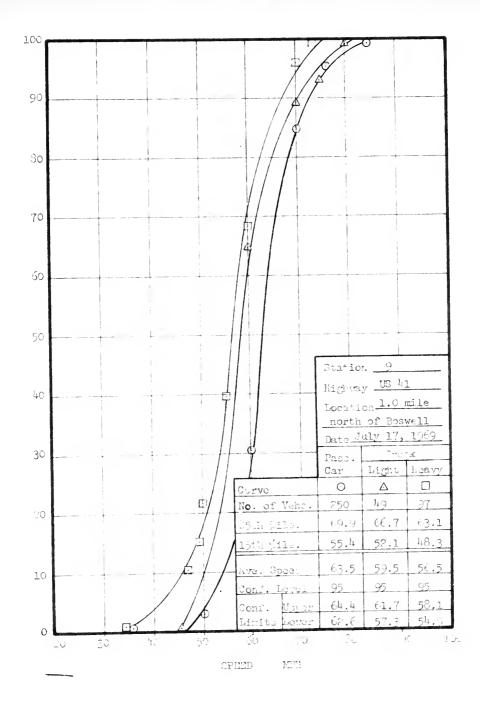




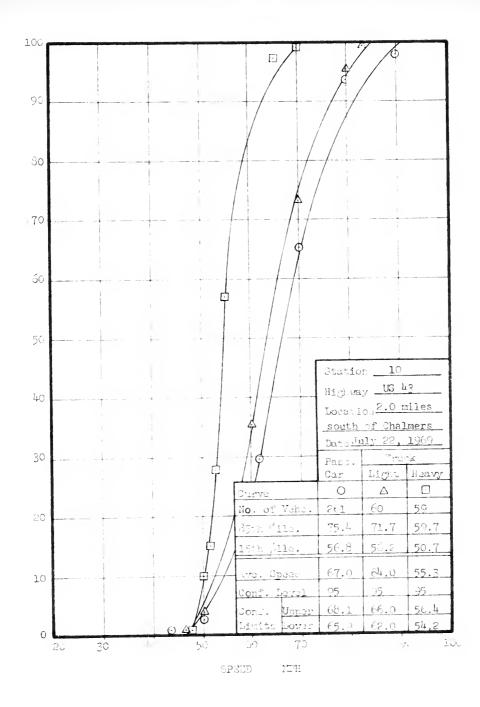


P. RCHWILLE



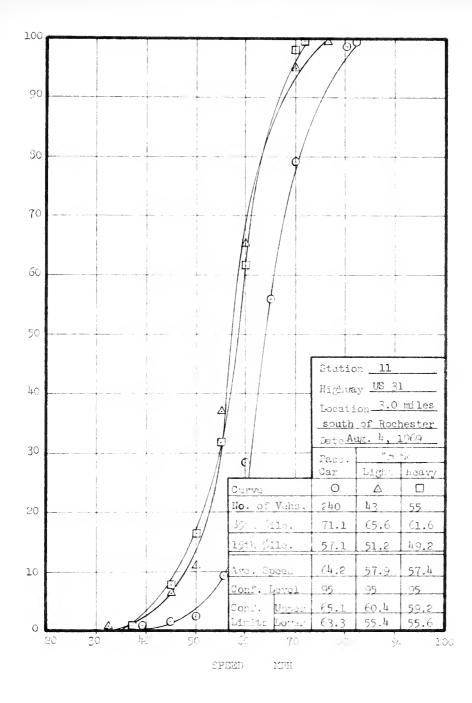






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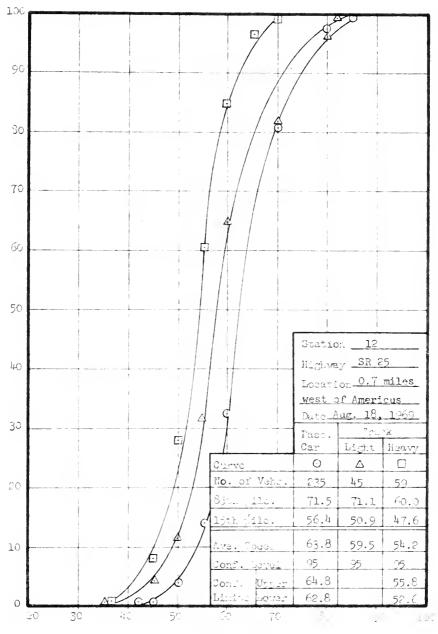




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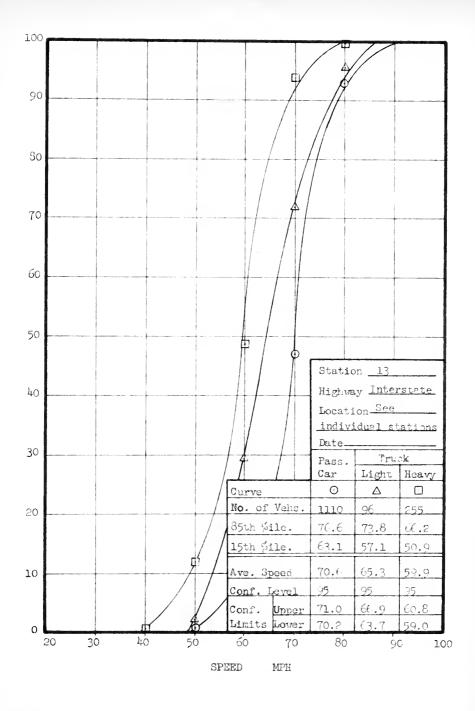






SPEED MITH





PERCHANTILE



